

Epoch.	Observer.	θ_0	θ_c	$\theta_0 - \theta_c$	ρ_0	ρ_c	$\rho_0 - \rho_c$
1879.66	Jedzrejewicz	68.6	70.22	-1.62	3.039	2.89	+0.149
1880.49	Franz	62.1	66.33	(-4.23)	2.69	2.72	-0.03
1880.57	Hall	65.5	65.83	-0.33	2.74	2.70	+0.04
1880.66	Schiaparelli	64.88	65.28	-0.40	2.692	2.68	+0.012
1880.66	Jedzrejewicz	62.8	65.28	-2.48	2.75	2.68	+0.07
1881.53	Hall	60.7	59.87	+0.83	2.49	2.51	-0.02
1882.564	„	56.4	52.80	+3.60	2.31	2.29	+0.02
1882.72	Engelmann	51.63	52.46	+0.83	2.314	2.28	+0.034
1883.49	Perrotin	45.62	46.48	-0.86	2.28	2.15	+0.13
1883.579	Young	43.20	45.75	-2.55	2.45	2.14	+0.31
1883.594	Hall	47.7	45.65	+2.05	2.28	2.14	+0.14
1883.68	Küstner	45.23	44.92	+0.31	2.511	2.11	+0.401
1883.72	Engelmann	43.64	44.61	-0.97	2.25	2.11	+0.14
1884.56	Perrotin	34.54	36.98	-2.44	2.088	2.00	+0.088
1884.588	Hall	37.6	36.71	+0.89	2.16	1.96	+0.20
1884.69	Engelmann	35.28	35.77	-0.49	2.204	1.96	+0.244
1885.566	Hall	29.5	28.24	+1.26	1.87	1.90	-0.03
1885.64	Engelmann	24.32	27.60	-3.28	2.06	1.90	+0.16
1886.528	Hall	13.8	16.64	-2.84	1.98	1.88	+0.10
1886.67	Engelmann	14.90	14.90	0.0	1.88	1.87	+0.01
1887.611	Hall	3.6	4.24	-0.64	1.93	1.83	+0.10
1887.812	Tarrant	3.49	1.97	+1.52	1.91	1.83	+0.08
1887.86	Young	2.50	1.43	+1.07	(2.35)	1.84	(+0.51)

The formulæ for the calculation of an ephemeris are as follows:—

$$\begin{aligned}
 u - 28.14 \sin u &= -4^{\circ}098 (t - 1807.65) \\
 \tan \frac{1}{2}V &= [0.2335038] \tan \frac{1}{2}u \\
 \tan (\theta - 120^{\circ} 5') &= [9.7185017] \tan (V + 171^{\circ} 45') \\
 \rho &= 4''.50 (1 - 0.4912 \cos u) \frac{\cos (V + 171^{\circ} 45')}{\cos (\theta - 120^{\circ} 5')}
 \end{aligned}$$

Observations of the Variable Star S (10) Sagittæ. By J. E. Gore.

The following are my observations of this short period variable in the year 1887. They form a continuation of the observations given in the *Monthly Notices* for March 1887.

The comparison stars are as before:—

11 Sagittæ	...	...	...	Mag.
				5.8
9 Sagittæ	...	...	...	6.6
DM + 16°, 4086	...	...	...	7.0

Date.	Dublin M.T.	Mag.	Date.	Dublin M.T.	Mag.
	h m			h m	
1887, Jan. 11	6 35	5.8	1887, Oct. 27	8 30	6.3
	12 6 5	5.7		27 10 30	6.2
Sept. 7	8 20	6.4		29 11 5	5.9
	16 7 40	6.4	Nov. 1	10 8	5.7
	17 8 15	6.1		13 6 15	6.1
	18 7 45	5.75		14 7 30	6.5
	18 10 55	5.65		27 7 10	5.8
	19 8 20	5.7	Dec. 4	7 10	5.8
	22 9 20	6.1		7 6 40	6.2
	23 9 15	6.1		9 9 20	6.1
	28 11 5	5.75		10 6 45	6.05
	29 7 55	5.65		11 7 25	5.7
	30 8 55	5.95		13 5 40	5.8
Oct. 8	7 45	6.1		16 7 5	6.3
	9 8 20	6.0		17 6 8	6.3
	12 9 20	6.2		19 7 15	5.75
	21 7 37	5.9		20 5 25	5.65
	23 10 15	5.7		21 5 58	5.7
	25 7 18	6.0		27 5 35	5.9

A maximum probably occurred during the night of December 20. This corresponds to epoch No. 480, reckoning from an assumed maximum observed by me 1876, December 14.

Introduction to a Catalogue of the Mean Colours of 758 Stars; with Appendix, containing the Colours of 26 Southern Stars. By W. S. Franks.

The Catalogue of Star Colours presented to the Society* differs somewhat from either of its predecessors. The first catalogue, undertaken at the suggestion of the late Rev. T. W. Webb (*Monthly Notices*, June 1878), was intended to give an approximate idea of the colours of all the naked-eye stars visible in these latitudes, as seen with a 5-inch refractor. It contained 3890 stars, the southern limit in Declination being -25° . The time occupied—about ten months—in the survey of so many stars was necessarily too short to admit of other than single observations of each object, and the list so made was regarded then more as an experimental opening of a new field than as a work for future reference. In 1884, however, the greater portion

* Deposited in the Library.